



Name: _____ #: _____

Date: _____

Section: _____ HR: _____

Chapter 3 Skills Lab: Mapping Earthquakes & Volcanoes

Interpreting Data

In this lab, you will interpret data on the locations of earthquakes and volcanoes to find patterns.

❖ Problem

Is there a pattern in the locations of earthquakes and volcanoes?

❖ Materials

- outline world map showing longitude and latitude
- data table showing the location where earthquakes occur and where volcanoes are located
- 4 pencils of different colors

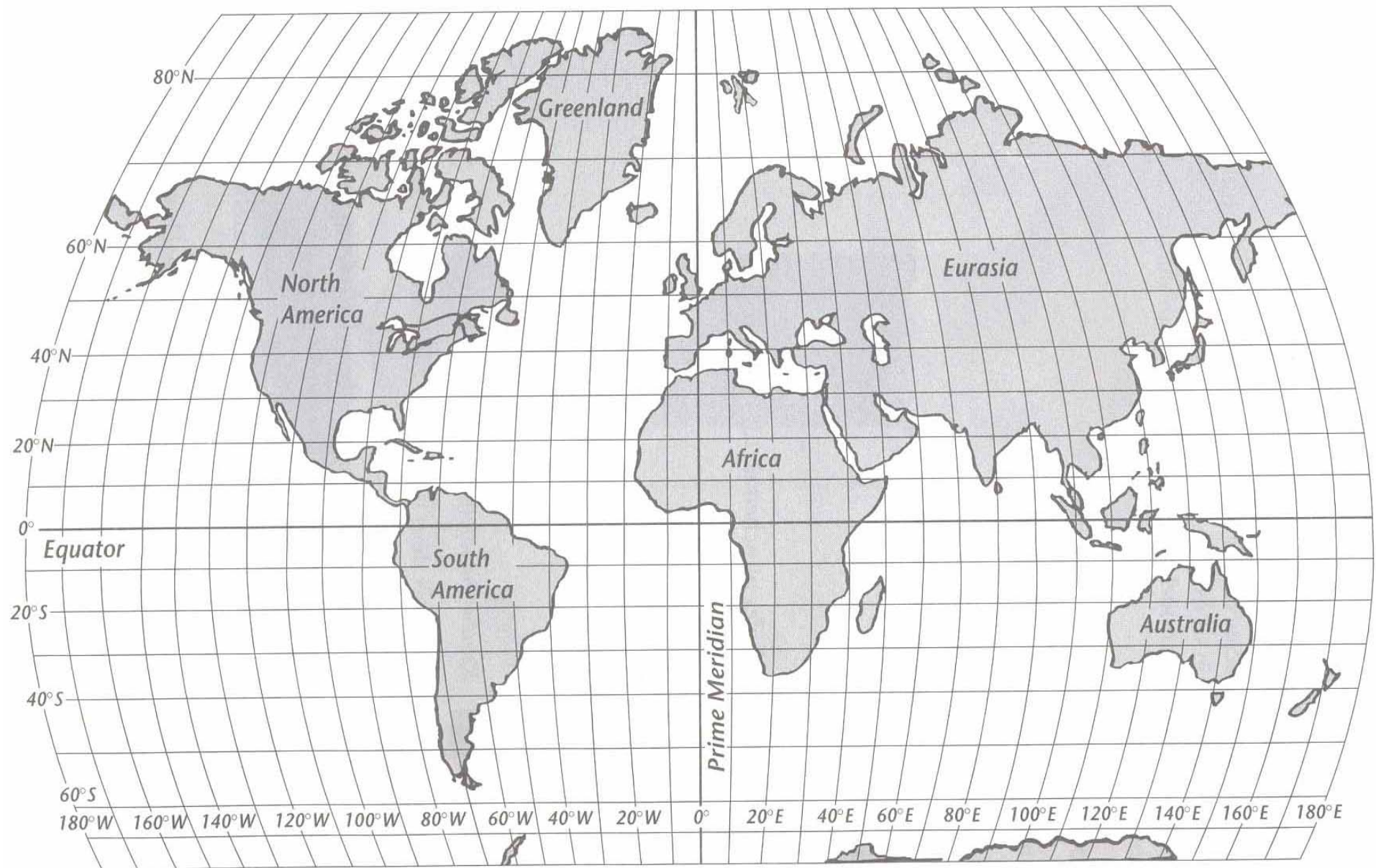
❖ Procedure

1. Use the information in the table on page 2 to mark the location of each earthquake on the world map on page 3. Use one of the colored pencils to draw the letter E inside a circle at each earthquake location.
2. Use a pencil of a second color to mark the locations of the volcanoes on the world map. Indicate each volcano with the letter V inside a circle.
3. Use a third pencil to lightly shade the areas in which earthquakes are found.
4. Use a fourth colored pencil to lightly shade the areas in which volcanoes are found.

❖ Data Table

Earthquakes		Volcanoes	
Longitude	Latitude	Longitude	Latitude
120°W	40°N	150°W	60°N
110°E	5°S	70°W	35°S
77°W	4°S	120°W	45°N
88°E	23°N	61°W	15°N
121°E	14°S	105°W	20°N
34°E	7°N	75°W	0°
74°W	44°N	122°W	40°N
70°W	30°S	30°E	40°N
10°E	45°N	60°E	30°N
85°W	13°N	160°E	55°N
125°E	23°N	37°E	3°S
30°E	35°N	145°E	40°N
140°E	35°N	120°E	10°S
12°E	46°N	14°E	41°N
75°E	28°N	105°E	5°S
150°W	61°N	35°E	15°N
68°W	47°S	70°W	30°S
175°E	41°S	175°E	39°S
121°E	17°N	123°E	38°N

❖ World Map



❖ Analyze & Conclude

1. How are earthquakes distributed on the map? Are they scattered evenly over Earth's surface? Are they concentrated in definite zones?

2. How are volcanoes distributed? Are they scattered evenly or concentrated in zones?

3. From your data, what can you infer about the relationship between earthquakes and volcanoes?

4. **Apply** Based on the data, which area of the North American continent would have the greatest risk of earthquake damage? Of volcano damage? Why would knowing this information be important to urban planners, engineers, and builders in this area?
